

# Compucorp<sup>®</sup>

System Guide 8:  
Columns, Drawing Lines,  
& Autopilot



# Overview

The features covered in this system guide—column functions, Line Mode, and Autopilot—can help you perform special tasks that are difficult or impossible with a typewriter. They can be used for technical and specialized applications, such as creating columns of text or figures, drawing lines, and performing procedures that require repetitive keystrokes.

Columns of figures or text can be created and repositioned easily with OMEGA. Section 1 explains how to create, edit, reposition, and delete columns of data using OMEGA's column functions. Section 2 introduces Line Mode (not available on Level A), which lets you draw vertical, horizontal, and diagonal lines. Text can be included in these drawings, so you can use this feature for such applications as organization charts and flow diagrams. Section 3 explains Autopilot (not available on Level A), a feature that allows you to perform selected operations automatically.

## Sections

1. Columns
2. Drawing lines (Not available on Level A.)
3. Autopilot (Not available on Level A.)

**Turn to the next page to begin Section 1.**

The image shows three overlapping sample documents demonstrating columnar text. The top-left document is a table with columns for STATE, COUNTY, DISTRICT, and various numerical data. The top-right document is a table with columns for NAME, ADDRESS, and various numerical data. The bottom document is a table with columns for NAME, ADDRESS, and various numerical data.

STATE	COUNTY	DISTRICT	NAME	ADDRESS	NUMERICAL DATA
ALABAMA	ALBANY	1	ALBANY	ALBANY	100
ALABAMA	ALBANY	2	ALBANY	ALBANY	200
ALABAMA	ALBANY	3	ALBANY	ALBANY	300
ALABAMA	ALBANY	4	ALBANY	ALBANY	400
ALABAMA	ALBANY	5	ALBANY	ALBANY	500
ALABAMA	ALBANY	6	ALBANY	ALBANY	600
ALABAMA	ALBANY	7	ALBANY	ALBANY	700
ALABAMA	ALBANY	8	ALBANY	ALBANY	800
ALABAMA	ALBANY	9	ALBANY	ALBANY	900
ALABAMA	ALBANY	10	ALBANY	ALBANY	1000

NAME	ADDRESS	NUMERICAL DATA
ALBANY	ALBANY	100
ALBANY	ALBANY	200
ALBANY	ALBANY	300
ALBANY	ALBANY	400
ALBANY	ALBANY	500
ALBANY	ALBANY	600
ALBANY	ALBANY	700
ALBANY	ALBANY	800
ALBANY	ALBANY	900
ALBANY	ALBANY	1000

NAME	ADDRESS	NUMERICAL DATA
ALBANY	ALBANY	100
ALBANY	ALBANY	200
ALBANY	ALBANY	300
ALBANY	ALBANY	400
ALBANY	ALBANY	500
ALBANY	ALBANY	600
ALBANY	ALBANY	700
ALBANY	ALBANY	800
ALBANY	ALBANY	900
ALBANY	ALBANY	1000

## Applications for typing columns

Tables of data, columns of figures, schedules, charts, and invoices are examples of columnar text you can produce easily with OMEGA's column functions. The ability to create columns is useful in many kinds of documents, including the following.

- Financial: balance sheets, statements, reports
- Architectural/engineering: test data, bills of material
- General office: invoices, forms, bills
- Medical: charts, tables, schedules

## Setting up columns

The first step in creating columns is setting tab stops. OMEGA's variety of tab stops make it easy for you to enter text or figures in columns.

## Tab stops

1. **Left flush tab:** You are already familiar with this type of tab. The text or figures align flush left at this tab stop. You set a left flush tab using the TAB key. In the illustration at the right, the first column contains text aligned on a left flush tab.
2. **Decimal tab:** When you type numbers on a decimal tab, they align on the decimal point at the tab stop location. The second column in the first illustration contains figures aligned on decimal points. If no decimal point is typed in a number, the system aligns that number as if a decimal point followed the last digit. In the third column in the illustration, the figures contain no decimal points. Notice, however, that they align to the left of the decimal tab stop, as if a decimal point followed each figure. A decimal tab is set with the period key.
3. **Center tab:** This tab can be used in column work to center column headings, as shown in the second illustration. You set this tab with the CENTER key.
4. **Right flush tab:** You can use this tab to align text or numbers flush right at the tab stop. You set this tab with the INDENT key.
5. **Character tab:** A character tab can be used in column work to align the column entries on any character, such as a dollar sign or a comma.

Setting special tab stops is discussed in detail in System Guide 3. You may want to review that section before you continue.

### Left Flush and Decimal Tabs

The diagram illustrates the layout of a punched card with the following fields and data:

PAGE	LINE	CHAR	R
1	3	1	1

The card contains the following data:

Month	Value
January	1350.75
February	1755.25
March	1432.50

Arrows indicate the flow of data from a source (labeled 1) to a destination (labeled 2).

### Center Tabs

Diagram illustrating a branching structure with a single source (3) branching into three destinations (NAME, ADDRESS, CITY/ST) which then branch into three destinations (ZIP, NAME, ADDRESS) which finally branch into three destinations (CITY/ST, ZIP, NAME).

	NAME	ADDRESS	CITY/ST	ZIP
1	Balerton, J.	894 Wals St.	Red Springs, NC	21583
2	Monroe, A.R.	45 Main St.	Albany, NY	12583
3	Ziegler, F.	1380 Mt. John	Decalb, IL	63410



# Typing columns

After the necessary tab stops are set, you can type text or figures in columns. Some typists are accustomed to entering column data vertically, that is, using a return after each entry. With OMEGA, data entered in columns is typed horizontally, across the page. The system automatically aligns each entry as you TAB to the next. The arrows in the first illustration show the order in which column text should be entered on your Compucorp system.

## Procedure

You can type an entry at the left margin, if desired. Then, to type the column entry, do the following:

1. Press the TAB key to move to the first tab stop. A tab marker displays to the left of the cursor, as shown in the second illustration.
2. You then type the entry. As you type, the characters display to the right of the tab marker.
3. When you finish typing the entry, press TAB. The cursor moves to the next tab stop and the typed entry aligns on its tab stop.

When you have completed the first line, press RETURN to move to the next line. Repeat these steps for any additional lines. If your columns do not align, press FORMAT.

## Correct Entry Procedure

PAGE 1 LINE 9 CHAR 39				
L				H R
PROJECT	PROJECT	STATUS	%C	COMMENTS,
NAME	NUMBER	CODE	COMP.	
CINB	137	1PP	195%	1Call Jones,
Quality Inc	125	1C	1100%	1Mail letters,
TPC	152			

## TAB to Tab Stop

PAGE 1 LINE 7 CHAR 31				
L				H R
PROJECT	PROJECT	STATUS	%C	COMMENTS,
NAME	NUMBER	CODE	COMP.	
CINB	137	1PP	195%	1Call Jones,
Quality Inc				

## Type the Entry

PAGE 1 LINE 7 CHAR 33				
L				H R
PROJECT	PROJECT	STATUS	%C	COMMENTS,
NAME	NUMBER	CODE	COMP.	
CINB	137	1PP	195%	1Call Jones,
Quality Inc	125			

## TAB to Next Tab Stop

### OMEGA Automatically Aligns Entry

PAGE 1 LINE 7 CHAR 39				
L				H R
PROJECT	PROJECT	STATUS	%C	COMMENTS,
NAME	NUMBER	CODE	COMP.	
CINB	137	1PP	195%	1Call Jones,
Quality Inc	125			

## Revising column text

Column entries may require minor editing for typographical errors. Or, you may revise column text regularly in certain documents such as monthly reports or schedules. By using Replace Mode, you can add, edit, or delete column entries without affecting the data in other columns. Replace Mode allows you to revise column text without disturbing the alignment of the columns.

### Advantages of using Replace Mode

When the system is in Replace Mode, the cursor displays as an underline. Each character you type replaces an existing one, and the SPACE BAR replaces a character with a blank space. Therefore, text in the columns does not shift when changes are made in Replace Mode.

The second illustration shows the result of editing a column in Insert Mode. Notice that the column alignment shifts, the old figures must be deleted, and the line must be reformatted.

In the third illustration, you can see the effect of editing a column in Replace Mode. The column alignment is not disturbed. When the system is in Replace Mode, you can also use the RETURN key and the TAB key to position the cursor quickly without affecting the alignment of the columns.

## Sample Revision

23	<del>19</del> 26	15
37	14	10
43	16	25

## Using Insert Mode

	PAGE	1	LINE	2	CHAR	52
						R
'						
'	123	125		15		
'	137	114		18		
'	143	116		25		

## Using Replace Mode

	PAGE	1	LINE	2	CHAR	52
					H	R
	123	126_	15			
	137	14	18			
	143	16	25			

## Entering Replace Mode

You can enter Replace Mode from the screen or from Document Status Menu One. If one-time, minor revisions are required in column text, you can put the system in Replace Mode from the screen. But if column text is revised frequently, you can use Document Status Menu One to set the section of text containing columns in Replace Mode permanently.

- **From the screen:** Enter Replace Mode from the screen by pressing COMMAND and typing RM (Replace Mode). The cursor displays as an underline. You can use the TAB and RETURN keys to move the cursor to the entry to be corrected, and then type the correction to replace the existing characters. Be careful not to type over a TAB screen marker because it will be deleted, causing misalignment. When you have completed the revisions, press COMMAND and type IM (Insert Mode) to return to normal editing.
- **From Document Status Menu One:** To set the column area in Replace Mode from Document Status Menu One, you first position the cursor on the line above the column area. Display Document Status Menu One and move the cursor to the line that reads "Insert or Replace mode." Change the "I" to "R" and then redisplay the document. Because you will want to edit the text following the columns in Insert Mode, you can turn off Replace Mode at the end of the column area. Move the cursor to the line after the column area and display Document Status Menu One again. Change the "R" back to "I." Each time you display the section of the document containing the columns, that section will be in Replace Mode.



# Using column functions

It is sometimes necessary to reposition or delete columns after they are typed. Or, you may want to insert new columns. When conventional typing methods are used, this kind of revision requires retyping all the column entries. With OMEGA's column functions, you can delete, clear, insert, exchange, and move columns easily without retyping.

## Column function procedures

1. **Access column functions:** The first step in revising columns is to access column functions. You do this by pressing COMMAND and then typing CF (Column Functions). The cursor can be anywhere on the screen when you access the column function.
2. **Indicate the beginning and end of the column area:** You then define the column area by responding to the messages OMEGA displays in the message area. These messages are shown in the first two illustrations at the right. To define the column area, position the cursor on the top row of the columns and press RETURN. Then position the cursor on the bottom row and press RETURN again. When you define the columns, the cursor only moves up and down. This does not matter because when you define the top and bottom of a column area, the cursor can be on any character on the line.

By defining the column area, you can work with the columns in their entirety, or you can work only with selected rows. Once you have accessed the column functions, the cursor only moves to the left or right.

After you have defined the column area, OMEGA labels each column with a letter. These letters display in the margin scale on the left margin and at each tab stop location. OMEGA also lists the column function options in the message area, as shown in the third illustration. These options are discussed on the next page.

3. **Select the desired column function:** To perform a column function, you type the letter indicating the desired function. These letters appear in parentheses in the message area following each option, as shown in the third illustration.
4. **Indicate the appropriate column or columns:** After you have selected a function, OMEGA displays a message asking which column or columns you wish to revise. You then type the letter or letters of the appropriate columns as displayed in the margin scale. If two columns are involved, you separate the letters with a period. In the last illustration at the right, the EXCHANGE option (X) was selected. The designated columns (b.d) will exchange positions.

## Indicate the Beginning of the Column Area

Put the cursor on the top row of the columns and press RETURN.

PAGE	1	LINE	3	CHAR	11
.....B.....C.....D.....H.....R.....					
MONTH   TERRITORY   SALESMAN   SALES,					
January   Chicago   Jones   22,178.75,					
January   Madison   Smith   14,898.00,					
January   Fort Wayne   Johnson   15,286.50,					

## Indicate the End of the Column Area

Now put the cursor on the bottom row and press RETURN

PAGE	1	LINE	7	CHAR	11
.....B.....C.....D.....H.....R.....					
MONTH   TERRITORY   SALESMAN   SALES,					
January   Chicago   Jones   22,178.75,					
January   Madison   Smith   14,898.00,					
January   Fort Wayne   Johnson   15,286.50,					

## Select the Desired Column Function

DELETE (D), CLEAR (C), INSERT (I), EXCHANGE (X), or MOVE (M) a column?

PAGE	1	LINE	3	CHAR	11
.....B.....C.....D.....H.....R.....					
MONTH   TERRITORY   SALESMAN   SALES,					
January   Chicago   Jones   22,178.75,					
January   Madison   Smith   14,898.00,					
January   Fort Wayne   Johnson   15,286.50,					

## Indicate the Appropriate Columns

EXCHANGE which columns? [b.d]

PAGE	1	LINE	3	CHAR	11
.....B.....C.....D.....H.....R.....					
MONTH   TERRITORY   SALESMAN   SALES,					
January   Chicago   Jones   22,178.75,					
January   Madison   Smith   14,898.00,					
January   Fort Wayne   Johnson   15,286.50,					

## Column function options

After you have entered column functions and defined the beginning and end of the column area, you can select from the five options displayed in the message area. These options are explained below and the result of each procedure is illustrated at the right.

1. **Delete a column (D):** This function deletes the text in the designated column as well as the tab markers for that column. It also eliminates the space the column occupied and moves the remaining columns to the left to fill the space. In the second illustration, column B was deleted.
2. **Clear a column (C):** When you select this function, the text in the specified column clears, but the space and the tab markers remain. Other columns do not move.
3. **Insert a blank column (I):** This function inserts a column of empty tab markers at the tab stop designated by the letter you type. The existing columns move to the right. Before you insert a column, make sure there is an empty tab stop to the right of the last column.
4. **Exchange columns (X):** When you select this option, the two designated columns exchange places.
5. **Move a column (M):** You can move any column to another specified tab stop. Other columns shift to fill the space that was occupied by the moved column. The last illustration shows the effect of moving column B to column position D.

You cannot perform normal editing when the system is in column functions. To cancel column functions and return to normal editing mode, press the RED key.

**Now complete Disk Instruction 8.1 Columns. To do this:**

- Turn on the system, if necessary, and insert the Master disk into Drive A.
- Fill in the date and time.
- When the margin scale appears, insert your Training disk into Drive B and display the Index.
- Recall document 8.1 Columns.

## Before Deleting a Column

```

DELETE (D), CLEAR (C), INSERT (I), EXCHANGE (X), or MOVE (M) a column?
                                PAGE 1 LINE 1 CHAR 58
A ..... B ..... C ..... D ..... H ..... R .....
|
AAAAAAA >BBBBBBB >CCCCCCC >DDDDDDD,
AAAAAAA >BBBBB >CCCCCCC >DDDDDDDD,
AAAAA >BBBBBB >CCCCC >DDDDD,
AAAAA >BBBBB >CCCCC >DD
  
```

## After Deleting Column B

```

DELETE (D), CLEAR (C), INSERT (I), EXCHANGE (X), or MOVE (M) a column?
                                PAGE 1 LINE 2 CHAR 45
A ..... B ..... C ..... D ..... H ..... R .....
|
AAAAAAA >CCCCCCC >DDDDDD,
AAAAAAA >CCCCCCCC >DDDDDDDD,
AAAAA >CCCCC >DDDDD,
AAAAA >CCCCC >DD
  
```

## Before Moving

```

DELETE (D), CLEAR (C), INSERT (I), EXCHANGE (X), or MOVE (M) a column?
                                PAGE 1 LINE 1 CHAR 58
A ..... B ..... C ..... D ..... H ..... R .....
|
AAAAAAA >BBBBBBB >CCCCCCC >DDDDDDD,
AAAAAAA >BBBBB >CCCCCCC >DDDDDDDD,
AAAAA >BBBBBB >CCCCC >DDDDD,
AAAAA >BBBBB >CCCCC >DD
  
```

## After Moving B to D

```

DELETE (D), CLEAR (C), INSERT (I), EXCHANGE (X), or MOVE (M) a column?
                                PAGE 1 LINE 1 CHAR 62
A ..... B ..... C ..... D ..... H ..... R .....
|
AAAAAAA >CCCCCCC >DDDDDDD >BBBBBBB,
AAAAAAA >CCCCCCCC >DDDDDDDD >BBBBB,
AAAAA >CCCCC >DDDDD >BBBBBBB,
AAAAA >CCCCC >DD >BBBBB
  
```

## 8.1 Cumulative Example

In this example you will review setting up columns, revising column entries, using column functions, and realigning columns.

Follow the instructions given below to complete the example. Refer to your Instructional Guide for assistance. If you encounter difficulty, turn to page 26 of this system guide for additional instructions.

1. On a clear screen, type the Sample Text below. Start typing on line 2. Set the left margin at 11 and the right margin at 79. Set left flush tabs at 25, 40, and 55. Type the first column at the left margin.
2. Save the columns and name them Your Name Cum Ex 8.1.

Ziess, K.	0079	Supervisor	11/09/80
Voosen, D.	0012	Analyst	02/08/78
Tuder, B.	0025	Manager	01/05/81
Gamble, E.	0040	Clerk	10/01/80

3. Print the document.
4. Revise the column entries as indicated below.

Zeiss, K.	0089	Supervisor	11/09/82
Voosen, D.	0012	Analyst	02/08/78
Tudor, B.	0024	Manager	01/05/81
Gamble, A.	0040	Secretary	10/01/81

5. Revise the columns so they appear as follows.

0089	Zeiss, K.	November 9, 1982
0012	Voosen, D.	February 8, 1978
0024	Tudor, B.	January 1, 1981
0040	Gamble, A.	October 1, 1981

Remember: You cannot edit while in column functions. Also, if your columns become misaligned you can FORMAT each line to realign them.

6. Save and print the revised document.

**You have now completed Section 1 of this system guide.**

**Level A Users:** You have now completed this system guide. To begin the next module, locate System Guide 9.

**Level B Users:** Turn to the next page to begin Section 2.



## Line drawing (not available on Level A)

Drawing lines is another special feature OMEGA offers. You can draw horizontal, vertical, and diagonal lines using the ten-key pad and OMEGA's Line Mode feature. You can include text in your line drawings to increase the versatility of this feature. You can use Line Mode to produce charts, as shown in the illustration at the right. Flow charts, organizational charts, and borders around text and illustrations are examples of other uses.

### Procedure for creating line drawings

When the system is in Line Mode, only the cursor movement keys and the numerical ten-key pad can be used. Before you enter Line Mode, make sure text is on the screen to provide space for your line drawing. Or, use the RETURN key to add enough blank lines for your line drawing before you enter Line Mode. The RETURN key does not function in Line Mode.

To enter Line Mode, press COMMAND and type LM (Line Mode). When you do so, OMEGA automatically enters Replace Mode so that the lines you type stay in place. The cursor appears as a line.

You use the ten-key numerical pad for creating lines in Line Mode. The direction of the lines produced by each key corresponds to the location of the key on the ten-key pad, as illustrated at the right. When you have finished your line drawing, cancel Line Mode by using the RED key.

When you create line drawings, the lines do not quite meet at the corners. To have the corners match exactly when printed, you can change the spacing between each line by tenths of a space. Refer to Chapter 28 of your Reference Manual to change to fractional line spacing.

Line Mode Used for Chart

COUNTY	POPULATION	AREA SQUARE MILE
Orange	385,914	507.7
Mason	79,552	659.3
York	143,975	1,042.9
Howell	257,832	734.6

Line Directions on Ten-Key Pad

7 ↙	8 ↑	9 ↗
4 ←	5 ↓	6 →
1 ↘	2 ↓	3 ↘

## Editing line drawings

- **Editing the text in a drawing:** After you have created a line drawing, you can add text to the drawing or edit existing text. To do so, you must first cancel Line Mode because the character keys do not operate. You then enter Replace Mode so that the text you add or the edits you make do not disturb the position of the lines in the drawing. With the system in Replace Mode, you can add or edit text in the drawing. After you have added or edited your text, return to Insert Mode.
- **Editing the drawing itself:** If you want to delete any portion of your line drawing, you must first cancel Line Mode. To do this, press the RED key. You can then enter Replace Mode and delete any unwanted lines without disturbing the alignment of your drawing. Use BACKSPACE or DEL CHAR to do this.

**Go to the next page and complete the disk instruction for this section.**

# Disk Instruction

The disk instructions for this section, Drawing Lines, are given to you in print, not on the screen. This is necessary because the examples require you to display a clear screen. You would be unable to follow the directions given on the screen.

Before you begin the examples, do the following:

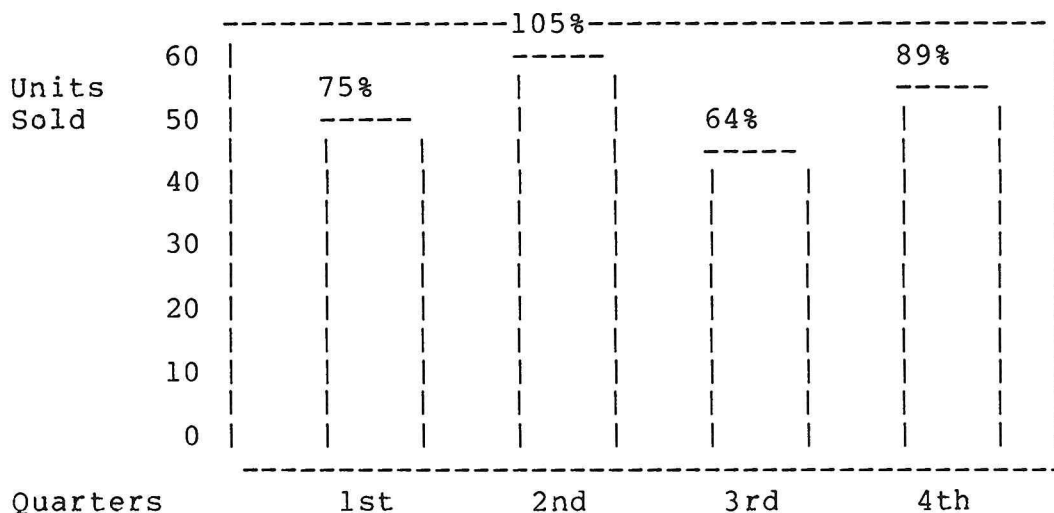
- Turn on the system, if necessary, and insert the Master disk into Drive A.
- Fill in the date and time.
- When the margin scale appears, insert your Training disk into Drive B.

In the following examples, you will practice drawing lines. You will also have an opportunity to insert text on the line drawings and edit the line drawings.

1. **Drawing Lines:** OMEGA's Line Mode allows you to draw vertical, horizontal, and diagonal lines on the screen. To draw lines on the screen you must have space to draw.

## A. EXAMPLE - Drawing lines

In this example you will create a bar graph identical to the one pictured below.



1. On a clear screen, create enough blank space to draw the bar graph by pressing RETURN 15 times.
2. Access Line Mode by pressing COMMAND and then typing LM. LINE MODE appears in the message area while you are in Line Mode.
3. Draw the box outlining the bars as follows:

Use the Arrow keys to position the cursor on line 15, character 22.

Draw a vertical line up to line 2 by pressing the 8 key on the ten-key pad. Go slowly to avoid going past your desired ending point.

Draw a horizontal line to character 65 by pressing the 6 key on the ten-key pad.

Draw a vertical line down to line 16 by pressing DOWN ARROW once, then using the 2 key on the ten-key pad.

Draw a horizontal line to character 22 by pressing the 4 key on the ten-key pad.

**CONTINUE THIS EXAMPLE ON THE NEXT PAGE**



## Disk Instruction (Cont.)

4. Draw the first bar. Remain in Line Mode and use the Arrow keys to position the cursor on line 15, character 27.

Draw a vertical line up to line 5 using the 8 key.

Draw a horizontal line to the right 5 positions, ending on character 32, using the 6 key.

Draw a vertical line down to line 16 by pressing DOWN ARROW once, then using the 2 key.

5. Draw the second bar. Use the Arrow keys to position the cursor 5 characters from the last bar—line 15, character 37.

Draw a line up to line 3—8 key.

Draw a line to the right, to character 42—6 key.

Draw a line down to line 16—DOWN ARROW once, then 2 key.

6. Draw the third bar. Position the cursor 5 characters from the last bar—line 15, character 47.

Draw a line up to line 6—8 key.

Draw a line to the right to character 52—6 key.

Draw a line down to line 16—DOWN ARROW once, then 2 key.

7. Draw the fourth bar 5 characters from the last bar up to line 4.

8. Cancel Line Mode by pressing the RED key.

### B. EXAMPLE - Adding text to line drawings

In this example you will add text to the bar graph you created in the previous example.

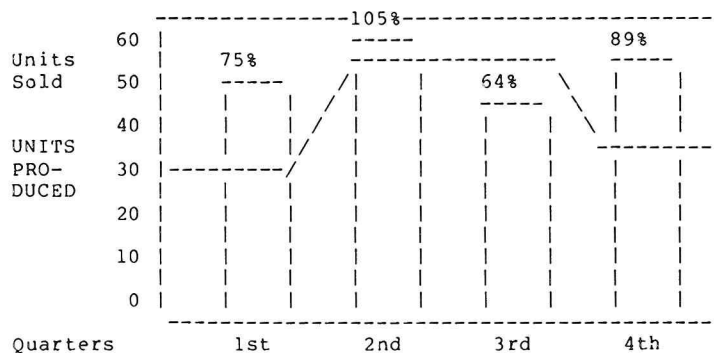
1. Access Replace Mode by pressing COMMAND and then typing RM.
2. Type in the text and numbers on the graph as illustrated on the previous page.
3. Return to Insert Mode by pressing COMMAND and then typing IM.
4. Save the bar graph. Name it Your Name 8.2.
5. Print the bar graph.

**CONTINUE THIS EXAMPLE ON THE NEXT PAGE**

# Disk Instruction (Cont.)

## C. EXAMPLE - Editing lines on a line drawing

In this example you will edit lines on the bar graph you created in the previous examples. Edit the bar graph as indicated in the illustration below. You will be adding diagonal lines.



1. Recall the document named Your Name 8.2.
2. Access Replace Mode—COMMAND RM—and type UNITS PRODUCED.
3. Access Line Mode—COMMAND LM—and create the horizontal and diagonal lines.

Position the cursor across from the 30 on the chart and use the 6 key to draw a horizontal line.

Then use the 9 key to draw the up right diagonal line as illustrated.

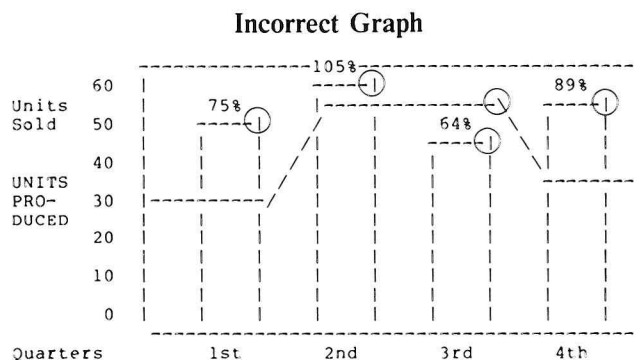
Use the 6 key to draw the horizontal line.

Press DOWN ARROW once, then use the 3 key to draw the down right diagonal.

Finish by drawing another horizontal line.

4. Update the bar graph—answer Y to the saving message—and print the revised bar graph.

NOTE: If your bar graph looks like the sample below, you forgot to press DOWN ARROW before changing directions.



**You have now completed Section 2. Turn to the next page to begin Section 3.**

# Saving keystrokes

Compucorp's two Autopilot functions (not available on Level A) are additional features that allow you to perform tasks that are impossible on a typewriter. You can use Autopilot for tasks that involve a time-consuming series of repetitive keystrokes, or for procedures that you repeat frequently. With Autopilot you can instruct OMEGA to perform certain procedures at any time automatically. Autopilot can carry out any series of keystrokes including keyboarding text and command sequences.

## Autopilot Concepts

To use Autopilot, you first determine the keystrokes needed to perform the desired function. Then you instruct OMEGA to perform the function automatically and repetitively.

There are two methods for using the Autopilot feature. To use the first method, you save the keystroke instructions in an "Autopilot document." You can then activate this document whenever you want OMEGA to perform the instructions. With the second method, called "Instant Autopilot," you perform the instructions once. OMEGA then remembers them and performs them repetitively until you tell it to stop.

## Applications

Autopilot can be used on a document with a consistent format to perform any series of keystrokes. A few examples of procedures OMEGA can perform in Autopilot are listed below.

1. You can use Instant Autopilot to insert tabs, commas, hyphens, bullets, or other text or format features repetitively in a new or existing document.
2. You can use Autopilot to perform a series of Search and Replace functions in a standard document for items such as dates, names, and information.
3. You can use Autopilot to perform complex operations such as a multiple merge procedure. One example of this procedure is sending a form letter to the people listed on several different mailing lists.
4. You can use Autopilot to prepare standard documents that contain variable figures. One example is a monthly forecast report containing financial data that must be updated at the end of each month.

## Before Using Autopilot

Word processors are sophisticated equipment configured around micro-processor technology. The growth potential is staggering.

Word processing will become so widely accepted that the office of today will not be recognizable a few years from now.

There will be new machines, layouts, jobs, and procedures, and different responsibilities to accommodate the increased need for effective office systems.

The present relationship between boss and secretary will change as the production of documents is turned over to an integrated office system.

## After Using Autopilot

Word processors are sophisticated equipment configured around micro-processor technology. The growth potential is staggering.

- Word processing will become so widely accepted that the office of today will not be recognizable a few years from now.

- There will be new machines, layouts, jobs, and procedures, and different responsibilities to accommodate the increased need for effective office systems.

- The present relationship between boss and secretary will change as the production of documents is turned over to an integrated office system.

## Standard Lease

### LEASE FOR APARTMENT

PAYMENT OF RENT: Lessee, named Louis Sorkin, will pay to Lessor rent for facilities at 4236 North Clark the monthly amount specified herein. Lessee shall pay, at rates fixed by Lessor, for switchboard service and/or telephone service. The monthly rent for the term of this lease will be \$465.00. Rent is payable in advance and due on or before the first day of the month and Lessee agrees to pay a late fee (to offset clerical costs) of \$10.00 if Lessor does not receive the full rent by the tenth of the month. Receipt of the \$10.00 late-payment fee will not derogate any of the Lessor's rights as expressed in this lease. If the Lessee's bank returns a check unpaid to the Lessor, the Lessor will require immediate cash replacement from the Lessee, plus a separate re-deposit fee of up to \$15.00 to compensate for additional expense.

## Invitation

### INVITATION

You are cordially invited to attend the gala opening of our new location on October 6, 1982. The festivities will begin at 8:00 PM, and will include a full buffet dinner, with dancing afterward.

There will be door prizes, including a new color television and special product offerings.

We hope you will be able to join us for this celebration. Please use the enclosed envelope to respond by September 20.

## Monthly Report

TOTAL			
DATE	AMOUNT	COUNT	AVERAGE
10/1/82	100.00	100	1.00
10/2/82	200.00	200	2.00
10/3/82	300.00	300	3.00
10/4/82	400.00	400	4.00
10/5/82	500.00	500	5.00
10/6/82	600.00	600	6.00
10/7/82	700.00	700	7.00
10/8/82	800.00	800	8.00
10/9/82	900.00	900	9.00
10/10/82	1000.00	1000	10.00

- A. Change lessee
- B. Change address
- C. Change rent amount

- A. Company "A" list
- B. Company "B" list
- C. Company "C" list



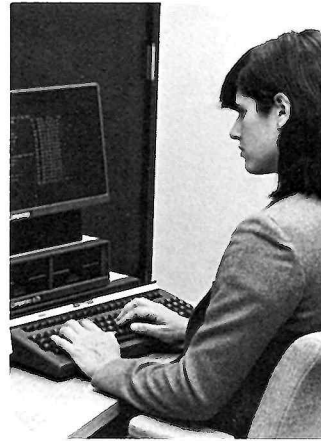
# Autopilot document

In the first Autopilot method, you use an Autopilot document containing instructions for OMEGA. Once you create this document, you can use it any time to have OMEGA carry out these instructions.

## Overview of the Autopilot procedure

1. **Perform and list all steps:** Before you create an Autopilot document, you perform the procedures you will use in Autopilot and write down the exact keystrokes as you perform them.
2. **Type instructions:** You then type these steps as instructions on the screen using a special format.
3. **Save the instructions:** After you type the instructions, you save them in a document and name the Autopilot document.
4. **Execute Autopilot:** When you have saved the Autopilot document, you simply display the Index and instruct the system to perform the function. OMEGA automatically performs the keystrokes contained in the Autopilot document.

Without Autopilot



With Autopilot



## Procedure

To create and execute an Autopilot document, you follow the four steps outlined on the previous page. These steps are covered in detail on the next two pages.

### 1. Perform and sketch the steps

Before you create an Autopilot document, you perform the procedures you will use so that you can identify every necessary keystroke. Write down on a piece of paper all steps in the order you will want OMEGA to perform them. The Autopilot document must specify every keystroke used for moving data from the disk to the screen, including the names of documents and responses to messages. You also identify every keystroke needed to move the cursor or perform keyboard functions and commands.

### 2. Type the instructions in an Autopilot document

After you have identified the steps, you type the procedure on a clear screen. The format in which you type these instructions is very important. On line 1, you must type the word AUTOPILOT in all capital letters. You then type the procedures you want OMEGA to perform, using the notes you made when you performed the steps yourself. The instructions for the procedures must be typed using the Autopilot "key words" listed at the right. These words represent keystrokes and must be typed in capital letters.

A special format is required when you type an Autopilot document. When you type text, document names, prompt responses, and command key sequences, you must surround them with quotation marks. For example, to specify search text, you would first press COMMAND and type the command key sequence in quotation marks "ST". Then you would type the text you are looking for in quotation marks, for example "Jones", followed by the RETURN keyword. To instruct OMEGA to repeat a keystroke, use parentheses to surround the number of times the keystroke is to be repeated. RETURN (5), for example, instructs OMEGA to RETURN five times. You also use parentheses to surround the number of seconds to pause in a WAIT instruction, as in the instruction WAIT (10). After you have typed all the Autopilot instructions, type the word END. This will stop the Autopilot process after OMEGA has carried out the instructions.

### 1. Sketch Steps

1. COMMAND IR
2. Type Doc Name, RTN
3. COMMAND ST, type text, RTN
4. CMD RT, type text, RTN
5. CMD REPLACE
6. HOME HOME UP
7. COMMAND PAGINATE
8. SAVE

### 2. Sample Autopilot Document

```

                                     PAGE 1 LINE 1 CHAP 11
                                     |-----|-----|
AUTOPLOT,
COMMAND "IR",
"Wm Jones Will" RETURN,
COMMAND "ST" "William" RETURN,
COMMAND "RT" "Elizabeth Ann" RETURN,
COMMAND REPLACE,
HOME HOME UP,
COMMAND PAGINATE,
SAVE,
END,
```

### Keywords

BACKSPACE	FIND	MARGIN	SAVE
BLOCK	FORMAT	MATH	SEARCH
BOLD		MERGE	SOFTYPHEN
	GLOSSARY	MOVE	SPELL
CENTER	GREEN	PAGEDOWN	STATUS
CLEAR		PAGEUP	STOPPRINT
COMMAND	HARDSPACE	PAGINATE	TAB
COPY	HOME	PRINT	TRACE
DELCHAR	INDENT		
DELETE	INDEX	RECALL	UNDERLINE
DELLINE		RED	UP
DELWORD	LEFT	REPLACE	
DOCUMENT		RETURN	WORD
DOWN		RIGHT	

### 3. Save the Autopilot document

When you have completed the Autopilot instructions, you save and name the Autopilot document. Once saved, these procedures may be executed at any time. When naming an Autopilot document, it is helpful to use Autopilot in the name. You may have more than one Autopilot document.

#### 4. Execute Autopilot

After you have saved the Autopilot document, you can execute the Autopilot function at any time. To do this, display the Index and position the cursor on the Autopilot document. Simply press **COMMAND** and then the **GREEN** key to execute the Autopilot function. OMEGA then performs the procedures typed in the Autopilot document automatically. Normal editing is not possible when OMEGA is executing the Autopilot function.

## Additional considerations

- You may edit an Autopilot document at any time. You can add to, delete, or change the instructions you have saved.
- Remember to include instructions to save if you are creating a new document.
- Each Autopilot instruction does not have to be listed on a separate line. However, as shown in the third illustration, it makes the document easier to read.

### 3. Save the Autopilot Document

SAVING TEXT: Please name this document: AUTOPILOT S/R Will

PAGE	1	LINE	1	CHAR	24
					H R
AUTOPILOT,					
COMMAND "IR",					
"Wm. Jones Will" RETURN,					
COMMAND "ST" "William" RETURN,					
COMMAND "RT" "Elizabeth Ann" RETURN,					

#### 4. Execute Autopilot

```

COMMAND-
Index for DISK1      313 FREE PAGES    TIME: 10:57:33
  DOCUMENT NAME      AUT    CREATED    REVISED    PAGES
John Smith Will      04/26/82  00/00/00  00:00      1
Mary Smith Will      04/26/82  00/00/00  00:00      1
Roger Brown Will     04/26/82  00/00/00  00:00      1
Evelyn Brown Will    04/26/82  00/00/00  00:00      1
Ma. Jones Will       04/26/82  00/00/00  00:00      1
AUTOPILOT S/R Will   04/26/82  00/00/00  00:00      1

```

```

PAGE      1  LINE      4  CHAR      32
-----L-----H-----R
AUTOPILOT COMMAND "IR" "M. Jones Will" RETURN COMMAND
"ST" "William" RETURN COMMAND "RT" "Elizabeth Ann"
RETURN COMMAND REPLACE HOME HOME UP COMMAND PAGINATE
SAVE END

```

```

PAGE      1  LINE      1  CHAR      11
-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
L|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
AUTOPILOT,
COMMAND "IR" ,
"Wm. Jones Will" RETURN,
COMMAND "ST" "William" RETURN,
COMMAND "RT" "Elizabeth Ann" RETURN,
COMMAND REPLACE,
HOME HOME UP ,
COMMAND PAGINATE,
SAVE ,
END ,

```

## Example of an Autopilot document

The sample Autopilot document at the right contains instructions for a series of Search and Replace operations. The instructions are explained below.

1. AUTOPILLOT must be typed on line 1 of every Autopilot document.
2. First recall the document to be edited. COMMAND IR (Index Recall) displays the "Recall which document?" message.
3. In reply to the message, type the document name in quotes and the keyword for the RETURN key.
4. Specify the search text by typing the search text command, the search text typed in quotes, and the RETURN keyword.
5. Specify the replace text by typing the replace text command, the replace text typed in quotes, and the RETURN keyword.
6. Instruct OMEGA to perform a global Search and Replace by typing the global Search and Replace command.
7. Bring the cursor back to the beginning of the document for the next instruction.
8. Specify the next search text by typing the search text command, search text, and the RETURN keyword.
9. Specify the next replace text by typing the replace text command, replace text, and the RETURN keyword.
10. Instruct OMEGA to perform a global Search and Replace by typing the global Search and Replace command.
11. Save the updated document.
12. Stop the Autopilot process.

## Sample Autopilot Document

```

PAGE      1      LINE      1      CHAR      2
AUTOTOPILOT,
COMMAND "IR",
"Contract Ace Industries" RETURN,
COMMAND "ST" "Ace" RETURN,
COMMAND "RT" "Clover" RETURN,
COMMAND REPLACE,
HOME HOME UP,
COMMAND "ST" "Mr Smith" RETURN,
COMMAND "RT" "Ms Smythe" RETURN,
COMMAND REPLACE,
SAVE,
END.

```



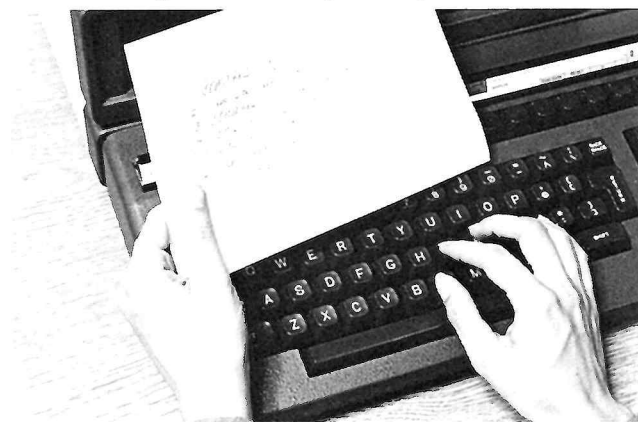
# Instant Autopilot

Instant Autopilot is similar to the Autopilot function described on the preceding pages. You can use Instant Autopilot to save time on repetitive keystroking. With Instant Autopilot, however, the keystroke instructions are not saved in a document. OMEGA saves the instructions in memory and performs the specified procedures on a one time basis.

## Procedure

1. Perform and list the steps: Go through the necessary steps just as you would before creating an Autopilot document. Note the exact sequence of keystrokes.
2. Position the cursor where the repetitive procedure is to begin. Access Instant Autopilot by pressing COMMAND, holding (CTRL), and pressing AUTOPILOT. The word AUTOPILOT displays in the message area.
3. Perform the keystrokes using the list you have made. The keystrokes do not display on the screen and the cursor does not move.
4. When you have entered all the necessary keystrokes, use (CTRL) AUTOPILOT to execute Instant Autopilot. The saved keystrokes will be repeated from the cursor position until you stop the process.
5. To stop the Instant Autopilot process, use the RED key (cancel).

## 3. Performing Instant Autopilot Keystrokes



## Autopilot summary

Following is a comparison of the purpose and procedure of Autopilot and Instant Autopilot.

	Autopilot	Instant Autopilot
Purpose	For periodically repeated procedures	For one-time repetitive tasks
Procedure	<ol style="list-style-type: none"><li>1. Perform and list all steps</li><li>2. Type instructions on screen using special format</li><li>3. Save instructions</li><li>4. Cursor on Autopilot document, COMMAND GREEN key</li></ol>	<ol style="list-style-type: none"><li>1. Perform and list all steps</li><li>2. Position cursor where repetitive procedure is to begin</li><li>3. COMMAND (CTRL) AUTOPILOT</li><li>4. Perform keystrokes</li><li>5. (CTRL) AUTOPILOT</li><li>6. RED key to stop</li></ol>

**Go to the next page and complete the disk instruction for this section.**

# Disk Instruction

The disk instructions for this section, Autopilot, are given to you in print, not on the screen. This is necessary because the examples require you to display a clear screen and saved documents. You would be unable to follow directions given on the screen.

Before you begin the examples, do the following:

- Turn on the system, if necessary, and insert the Master disk into Drive A.
- Fill in the date and time.
- When the margin scale appears, insert your Training disk into Drive B.

In the following examples, you will practice sketching, typing, and executing an Autopilot document. You will also sketch the steps to perform a procedure repetitively and use Instant Autopilot to perform the steps.

1. **Autopilot:** OMEGA's Autopilot function allows you to type the keystrokes necessary to perform a repetitive procedure in an Autopilot document. Then, by executing the Autopilot document, OMEGA automatically performs the repetitive procedure for you at any time.

You will have an opportunity to use Autopilot to perform a multiple Search and Replace in a document.

## A. EXAMPLE - Sketch the steps required to perform the procedure

In this example you will become familiar with the document and the text to be searched and replaced. Then you will sketch the steps necessary to perform a multiple Search and Replace.

1. Print document 8.3 Sample Document.
2. You are to perform three Search and Replace commands as follows:
  - Replace "JOB" with "POSITION."
  - Replace "the company" with "the corporation."
  - Replace "He/she" with "incumbent."
3. On a piece of paper, list each keystroke you would need to perform Search and Replace three times.

Write the list now. When you have the list as complete as possible, turn to page 25 of this system guide and compare your list to the sample sketch.

If your list differs from the sketch on Page 25, read the Sketch Instructions. If your list matches the sketch, proceed to Example B.

**CONTINUE TO THE NEXT EXAMPLE**

# Disk Instruction (Cont.)

## B. EXAMPLE - Type Autopilot instructions

In this example you will use the sketch you created in the previous example to create Autopilot instructions on the system.

1. On a clear screen, begin the Autopilot instructions on line 1, by typing AUTOPILOT in capital letters.
2. Then type the "steps" required to perform a multiple Search and Replace by using the Autopilot keywords and your sketch. Also, refer to your OMEGA Reference Manual for assistance.

Remember:

Keywords are typed in capital letters.

Surround text, document names, prompt responses, and command key sequences with quotation marks. For example, COMMAND "IR" and "8.3 Sample Document."

The keyword END must be typed at the end of the instructions to stop the Autopilot process.

3. When you have finished typing your instructions, save the Autopilot document.
4. Print your Autopilot instructions. Compare your instructions to the instructions on Page 25 of this system guide. If they do not match, recall your instructions, correct them, and update your Autopilot document.

If they match, proceed to the next example.

## C. EXAMPLE - Execute Autopilot

In this example you will execute the Autopilot document you created in the previous example and observe OMEGA perform the multiple Search and Replace.

1. Display the Index of your Training disk.
2. To execute Autopilot, position the cursor on your Autopilot document, press COMMAND, and then press the GREEN key.

Observe as OMEGA automatically recalls the document, performs the multiple Search and Replace, and saves the changes on the document.

3. Recall document 8.3 Sample Document.Reformat and save the document. Answer N to the updating message and name the document Sample Revised.
4. Print document Sample Revised and compare it to your previous printout. Note the text which was replaced.

**CONTINUE TO THE NEXT EXAMPLE**

## Disk Instruction (Cont.)

- 2. Instant Autopilot:** The Instant Autopilot function allows you to perform repetitive keystrokes while inputting or editing a document.

In these examples you will sketch the keystrokes required to add signature lines to a list of 10 to 15 names. Then you will type the keystrokes and instruct OMEGA to perform them over and over again until you press the RED key.

### A. EXAMPLE - Perform and list the steps

1. Recall document 8.3 Instant Autopilot.
2. Note the names listed on the page. You will add signature lines (underlines) after each name. To determine the keystrokes needed, actually perform the procedure with the first name.
3. Begin with the cursor where the repetitive procedure is to begin—with the cursor on the return marker after the first name.
4. The first step is to press TAB to move the cursor to where the line should begin. Do this now. Then write down TAB on your sketch as the first step.
5. Next you type an underline 15 times. Do this now. Then write down UNDERLINE 15 times.
6. The next step is to get the cursor in position to insert the underline after the second name. Because your cursor is at the end of the first line, you need to press DOWN ARROW to get to the next line. Do this and write down the step.

Then, to move your cursor to the end of the name, press HOME RIGHT. Write down the step.

7. You are now in the starting position to repeat all of the steps you have listed. Before you perform Instant Autopilot, compare your sketch to the Instant Autopilot Sketch on Page 24 of this system guide. You must perform the steps as listed.

**CONTINUE TO THE NEXT EXAMPLE**



## Disk Instruction (Cont.)

### B. EXAMPLE - Perform the steps as listed

1. To perform the Instant Autopilot steps, first position the cursor where the repetitive procedure is to begin—the return marker after the second name.
2. Access Instant Autopilot by pressing COMMAND and then pressing (CTRL) AUTOPILOT. AUTOPILOT displays in the message area.
3. Now you are ready to enter all the keystrokes. The keystrokes do not display on the screen and the cursor does not move.

First, press TAB. Then press the underline symbol (0/\_\_\_) key 15 times. Then press DOWN ARROW once. And press HOME RIGHT once.

### C. EXAMPLE - Execute Instant Autopilot

1. To execute Instant Autopilot, press (CTRL) AUTOPILOT. The keystrokes saved in OMEGA'S Autopilot memory will be repeated from the cursor position until you stop the procedure.
2. Stop the procedure by pressing the RED key.
3. Save the document as a new document (N) and name it YOUR NAME 8.3.
4. Print YOUR NAME 8.3.

**You have now completed System Guide 8. To begin the next module, locate System Guide 9.**

# HELPS

## Help for Cumulative Example 8.1

To indent the column entries as directed in #4:

1. Access Replace Mode by pressing COMMAND and then typing RM.
2. Position the cursor on each character to be revised and type the correct character. For example, position the cursor on the i in Ziess and type ei. Repeat this procedure on all revisions.
3. Return to Insert Mode by pressing COMMAND and then typing IM.

To revise the columns as directed in #5:

1. Access column functions by pressing COMMAND CF.
2. Follow the directions given in the message area. "Put the cursor on the top row of the columns and press RETURN." "Now put the cursor on the bottom row and press RETURN."
3. Delete the third column by typing d and then c. Press RETURN.
4. Exchange the first and second columns by typing x and then a.b. Press RETURN.
5. Clear the third column by typing c and then c. Press RETURN.
6. Cancel column functions by pressing the RED key.
7. Type the new column of dates using the tab stop for the third column.

Save the document by answering Y (yes) to the updating question.

## Help for Cumulative Example 8.3

### Autopilot Sketch

Multiple s/r

Index Recall

Document Name, return

Command ST

JOB, return

Command RT

POSITION, return

COMMAND REPLACE

HOME HOME UP

### Autopilot Document

```
PAGE 1 LINE 17 CHAR 11
-----
AUTOPILOT,
COMMAND "IR",
"8.3 Sample Document" RETURN,
COMMAND ST "JOB" RETURN,
COMMAND RT "POSITION" RETURN,
COMMAND REPLACE,
HOME HOME UP,
COMMAND ST "company" RETURN,
COMMAND RT "corporation" RETURN,
COMMAND REPLACE,
HOME HOME UP,
COMMAND ST "He/she" RETURN,
COMMAND RT "Incumbent" RETURN,
COMMAND REPLACE,
SAVE,
END,
```

### Instant Autopilot Sketch

TAB  
UNDERLINE 15 TIMES  
DOWN ARROW  
HOME RIGHT

### Sketch instructions

You begin from a clear screen. To recall the document, first type COMMAND IR.

Then type the name of the document.

Press RETURN.

When the document appears, you specify the search text—COMMAND ST, type the text, RETURN. Then specify the replace text—COMMAND RT, type the text, RETURN.

Then you perform the Search and Replace—COMMAND (CTRL) REPLACE.

When OMEGA finishes a Search and Replace, the cursor is at the end of the document. To perform the next Search and Replace, you first return to the beginning of the document—HOME HOME UP.

Then you repeat the steps for the next two Search and Replace items.

When OMEGA has completed the last Search and Replace, you save the document—SAVE.

